### (12)特許協力条約に基づいて公開された国際出願

### (19) 世界知的所有権機関 国際事務局



## ! INDIA BUMATAN IN BERKE KIRIK BARK BARK BERL KU KU BARK BARBE KURI BUMA BARK BUMA BERLAK KATA KATA KATA KATA K

# (43) 国際公開日 2004 年5 月27 日 (27.05.2004)

### **PCT**

### (10) 国際公開番号 WO 2004/043575 A1

(51) 国際特許分類7:

B01D 53/94

(21) 国際出願番号:

PCT/JP2003/013952

(22) 国際出願日:

2003年10月30日(30.10.2003)

(25) 国際出願の言語:

日本語

(26) 国際公開の言語:

日本語

(30) 優先権データ:

特願2002-320390 2002年11月1日(01.11.2002) JP

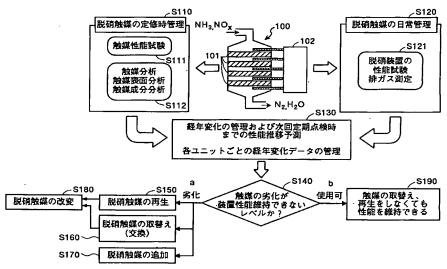
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- (81) 指定国(国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR,

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(54) Title: DENITRATION CATALYST MANAGEMENT METHOD AND DENITRATION CATALYST MANAGEMENT DE-VICE

#### (54) 発明の名称: 脱硝触媒管理方法および脱硝触媒管理装置



S110...PERIODICAL MAINTENANCE MANAGEMENT OF DENITRATION CATALYST

S111...CATALYST PERFORMANCE TEST

S112...CATALYST ANALYSIS, CATALYST SURFACE ANALYSIS, CATALYST COMPONENT ANALYSIS

S120...DAILY MANAGEMENT OF DENITRATION CATALYST

S121...DENITRIZER PERFORMANCE TEST, EXHAUST GAS MEASUREMENT

S130...MANAGEMENT OF VARIATION WITH TIME AND PREDICTION OF PERFORMANCE CHANGE TILL NEXT PERIODICAL INSPECTION, MANAGEMENT OF DATA ON VARIATION WITH TIME OF EACH UNIT

S180...CHANGE OF SHAPE OF DENITRATION CATALYST

S150...REGENERATION OF DENITRATION CATALYST

S160...REPLACEMENT OF DENITRATION CATALYST (REPLACEMENT)

S170...ADDITION OF DENITRATION CATALYST

a...DETERIORATION

S140...HAS DETERIORATION OF CATALYST REACHED LEVEL AT WHICH DENITRIZER CANNOT EXHIBIT ITS PERFORMANCE?

b...USABLE

S190...PERFORMANCE CAN BE EXHIBITED EVEN IF CATALYST IS NOT REPLACED NOR REGENERATED

(57) Abstract: Data on variation with time of each unit of denitration catalyst (101) is managed according to the data collected by periodical maintenance management (step S110) and daily management (step S120), and management of variation with time and prediction of performance change till the next periodical inspection are performed (step S130). It is determined whether or not the deterioration of the denitration catalyst (101) reaches level at which an exhaust gas denitrizer (100) cannot exhibits its performance (step S140). If the deterioration is judged to have reached the level (step \$140: deterioration), the denitration catalyst (101) is regenerated or replaced, or a denitration catalyst is added (steps \$150, 160, 170), or the shape of the catalyst is changed if necessary (step \$180). If the denitration catalyst can be still used (step S140: usable), the denitration catalyst (101) is not replaced nor regenerated (step S190).

#### **ABSTRACT**

Secular change data on each unit of denitration catalysts (101) is managed based on data obtained by a periodic maintenance management (step S110) and a daily management (step S120), and management of a secular change and a performance variation prediction until a next periodic check is performed (step S130). It is determined whether a deterioration of the denitration catalyst (101) reaches a level at which a performance of an exhaust-gas denitration system (100) cannot be maintained (step S140). If it is determined that the deterioration is positive ("deteriorated" at step S140), then a regeneration, a replacement, or an addition of the denitration catalyst (101) is performed (steps S150, 160, and 170), the denitration catalyst is altered if necessary (step S180), and the denitration catalyst (101) is not replaced or regenerated (step S190) if it is recognized that the catalyst is usable ("usable" at step S140).